



## GAMESA AND THE OFFSHORE WIND MARKET

- With over 15 years experience, Gamesa is a world leader in the design, manufacture, installation and maintenance of wind turbines, having installed 21,000 MW in some 30 countries across four continents, with 14,000 MW under O&M agreements
- Gamesa has some thirty factories in Europe, the US, China, India and Brazil and a global headcount of over 7,200 professionals
- The company is also a global benchmark in the development, construction and sale of wind farms. Gamesa has already installed over 4,100 MW and currently boasts a pipeline of 22,600 MW at varying stages of development in Europe, the Americas and Asia
- In 2010, Gamesa's consolidated revenues amounted to more than 2,764 million euro. International markets accounted for almost 93% of whole sales.

### Gamesa is ready to play a significant role in the offshore industry

The company is working on the design and develop of two families of offshore turbines (G11X-5.0 MW and G14X, of 6-7 MW) to participate in planned offshore wind power development in the North Sea in the coming years.

Gamesa's two new families of offshore turbines are based on the proved and validated technology used in its G10X-4.5 MW turbine system. The first two prototypes of its G11X system, with unit capacity of 5 MW, will be tested in the last quarter of 2012, with pre-series models ready for market entry in 2013. G14X, 6-7 MW, pre series are scheduled for 2014..

Gamesa has chosen the United Kingdom as the worldwide centre of its offshore wind energy business, with investments up to 150 million euro there by 2014:

- Gamesa plans the construction of a blade manufacturing plant (location, under study) in United Kingdom and engaging in offshore logistics from a number of UK ports, around which it will locate its wind turbine O&M operations;
- Likewise the company plans a further potential development of an industrial base for manufacturing, logistics and operation and maintenance activities in Dundee, Scotland, conditional upon development of offshore wind projects in the area and the availability of sites for prototypes;
- Gamesa will set up its offshore technology centre in Glasgow, Scotland. The company has confirmed that the Technology Centre will be located at Strathclyde Business Park, about eight miles east of the city centre. The recruitment process has started and it will be completed with around 40 engineering staff by July/August, with the potential to grow this to more than 100 employees by the end of this year - rising to 180 within three years of the Centre beginning operational. It is due to be officially opened in the Autumn;
- London will be base of the global headquarters of Gamesa's offshore division. The London office will also handle sales, project management, finance and administration for the offshore business.

Gamesa estimates that the construction and development of its offshore wind business in the United Kingdom will create over 1,000 direct jobs and another 800 indirect jobs at local suppliers.

### **Offshore development in other markets**

The company is working in partnership with Newport News Shipbuilding, a unit of Northrop Grumman Corporation, a leading US-based defence company and the No. 1 shipbuilding firm in the United States, to develop the first offshore prototype of the Gamesa G11X-4.0 MW. On 10 February 2011, both companies launched an offshore wind technology centre in Chesapeake, Virginia (USA).

In Spain, the company has signed a framework technology cooperation agreement with the Catalonia Institute for Energy Research (IREC), seeking to reserve four spaces at IREC's offshore wind energy laboratory, ZÉFIR Test Station in Tarragona (Catalonia), for the subsequent installation of Gamesa's turbines.

Likewise, Gamesa coordinates Azimut. Offshore Wind Energy 2020 project, partnering with 10 other companies and 22 research centres specialising in offshore wind energy technologies. The project aims to generate the know-how required to develop a large-scale marine wind turbine (15 MW) using 100% Spanish technology.